

Golden Sands Speedway

Mod-4Cylinder

2009 Rules

COMPETING MODELS-ELIGIBILITY

- A. Any front or rear, two-wheel drive, car or mini-truck, having a minimum of 92" wheel base, with a four cylinder, normally aspirated, single cam engine (no dual overhead cam, super or turbo-charged engines). Entrees must be a minimum of ten years old, meaning a manufacture date of 1997 or older; this includes all engine components. In all respects, the entire vehicle, (except as specified) is to utilize STOCK and unmodified parts for that vehicle.
- B. Coupes and sedans only; no convertibles, station wagons, roadsters, etc.

Engines

General Specifications:

- 1) 4-cylinder engine, no larger than factory equipped cc. No Rotary Engines. No Titanium Parts!
- 2) Engines may not cross MFG lines. Ford engine in Chevy body, etc.
- 3) Engine to remain in stock location – no farther left than center of car, no tilting
- 4) Engine mounts must be in stock location, may be solid
- 5) No motor plates allowed
- 6) Modified oil pans permissible. Maximum capacity is 7 quarts
- 7) Crankshaft Power pulley allowed
- 8) After market pulley's & belt tensioners allowed
- 9) Remote oil filters and oil coolers allowed
- 10) No plastic lines to oil pressure gauges – steel braided preferred
- 11) Stock cast iron or steel OEM parts only
- 12) Intake and exhaust manifolds may be interchanged, make on make.

Engine Specifications, Head:

- 1) Stock cast iron head only. No porting, polishing, shot peening, acid etching, gasket matching, flow honing- any steps to remove material or change flow direction are not acceptable. Aluminum heads allowed only on vehicles factory equipped with them.
- 2) Stock type steel valve train components only – valves, springs, etc.
- 3) Valve and valve seats must be stock diameter.
- 4) No back cutting, or swirl polishing allowed
- 5) Multi angle valve grinding acceptable, valve seats must remain in stock location.
- 6) Hydraulic lifters allowed.
- 7) No roller followers/cams. Unless factory (make, model, year)
- 8) Adjustable cam pulley allowed.

- 9) Solid Adjustable lifters allowed.

Engine Specifications, Block:

- 1) Stock cast iron block only, unless factory equipped otherwise (make, model, year)
Ford: 2000 or 2300cc, GM: 151 or 153, Vega 2300, only (cast iron version).
- 2) No performance or after market race blocks allowed.
- 3) Stock Stroke for engine being used.
- 4) Stock piston allowed, hypereutectic aftermarket allowed, NO AFTERMARKET foraged pistons.
- 5) Stock rods only. 2000 rods in 2000 engines, 2300 rods in 2300 engines etc. No crossing. Stock stroke, stock weight, Neon's may run Eagle stock style rods.
- 6) After market rod bolts are allowed.
- 7) Rods may be sized, balanced, or bead blasted.
- 8) No grinding, lightening, or polishing of rods.
- 9) No after market rods of any kind acceptable.
- 10) No switching of MFG parts. I.E. no Chevrolet or Toyota rods in Ford blocks.
- 11) No crank lightening or grinding. Any procedure associated with a common rebuild is acceptable. No small journal cranks.
- 12) No Modifications to allow late, small journal crank in early large journal block
- 13) Balancing of internal engine components is acceptable. Balancing and lightening are not the same; make sure your machinist knows the difference.

Carburetion

- 1) All cars allowed to use the Holley 350 or #5200 carburetor, UNMODIFIED!
Holley 500 carburetor can be used by rear drive cars only, also UNMODIFIED!
Choke plates may be removed. Holley 500 requires weight addition. See weight Chart on last page.
- 2) Maximum 2-inch adapter plate between intake and carburetor.
- 3) Stock intake manifolds only. No performance types allowed. No modifications of any kind, including gasket matching.
- 4) Two-throttle return springs mandatory. Springs must be attached to engine.
- 5) ALL entrees using fuel injection systems must provide club inspector information on the throttle body dimensions of their particular throttle body.

Fuel Systems

- 1) Electric fuel pumps allowed only on those vehicles factory equipped with them.
- 2) **A fuel cell is required, maximum of 16 gallons.** Cell must be enclosed in a **Minimum** 18 gauge steel can. The area below the tank must be open so fuel cannot exit onto trunk floor. Cell must be securely mounted between frame rails, (bolted or welded to support bars, not just strapped to trunk floor). A fuel cell protection bar **must** be installed to prevent cell from becoming damaged in a rear collision. Fuel cell should be no less than 8" from ground.
- 3) Fuel line running through driver's compartment not recommended. However, if they are, they shall be enclosed in a rigid metal tube, and must be approved by Golden Sands Speedway. Tech official **PRIOR** to competing in an event.
- 4) Filler spout to be inside trunk area and sealed off from driver's compartment.

- 5) Firewall required between driver's compartment and fuel compartment minimum of 24-gauge metal.
- 6) All holes must be completely covered with steel.
- 7) No fuel lines in rocker panels.
- 8) Nitrous Oxide or like products are not permitted.
- 9) Fuel cooling systems allowed.

Cooling System

- 1) Shroud above fan mandatory, if running a mechanical fan.
- 2) Electric fans allowed.
- 3) Radiator over-flow required. No plastic cans allowed unless factory equipped.
- 4) No antifreeze, or similar products.
- 5) Radiator must remain in stock location. Mounts may be replaced/reconstructed.

Electrical System

- 1) If not in stock location, battery must be mounted behind driver, on floorboard, in minimum 18-gauge steel, box. Marine type plastic boxes allowed.
- 2) All cars will have starters in good working order, accessible to the driver while strapped in, as well as from outside the car. All cars must be able to start on their own power to maintain their starting position.
- 3) All cars must have an electrical system disable switch mounted behind driver's seat, accessible from outside the car, and clearly marked. An additional auxiliary switch is optional.
- 4) No high performance or aftermarket ignition systems permitted.
- 5) Battery cables must have grommets on box to prevent chaffing.
- 6) Radio communications are not allowed.

Exhaust

- 1) Aftermarket headers allowed.
- 2) Exhaust must exit behind the drivers' compartment and underneath the car. (NOT out the side) You may build a box into the floor pan on the passenger side to raise the muffler from the ground. The box must be sealed to prevent any leaks into the drivers' compartment. SUBJECT TO INSPECTORS APPROVAL!

Bodies

- 1) All cars will maintain stock appearance as OEM.
- 2) Floor pan (see section 6, letter b), body, and chassis must maintain OEM appearance. Items may be removed to lighten the car that will not affect structural integrity. Hood, trunk-lid, and inner front fenders (TO THE FIREWALL ONLY!) may be skinned. Doors may be skinned to accommodate roll cage and ease in repair.
- 3) Mini-trucks may cut out floor of bed, inner rear fender wells, and inner tailgate. Trucks cutting these items out of the bed are required to have a metal bed cover of some sort.
- 4) Doors and Rear quarter panels may be fabricated. Original bodylines must remain! STEEL ONLY! At least as heavy gauge steel as factory panels.

- 5) Full stock floorboards (Except for exhaust box) and firewalls mandatory. All holes must be covered in a safe manner. Rusty floors may be patched with steel of same gauge as original floor. **SUBJECT TO INSPECTORS APPROVAL.**
- 6) No chopping of roof or narrowing of body. Car must retain original bodylines and dimensions. Roof must remain as original material used at time of manufacture.
- 7) Aftermarket plastic nose/tails allowed. No excessive cutting of fenders/decks allowed.
- 8) All bumpers shall be fastened to fenders and quarter panels in such a manner that will prevent "Hooking".
- 9) Trunks require (2) pins at rear edge, and (2) pins at leading edge if hinges are not used.
- 10) Hoods require (2) pins across front, and (2) pins at the rear if hinges are not used.
- 11) Well-secured tow mounts required front and rear.

Appearance/Numbering

- 1) All cars to be neatly and brightly painted.
- 2) All cars will display one or two digit numbers (00 – 99). No letters as primary number.
- 3) Number will be minimum of 18" on top of car, and each door. Numbers on roof to face toward scoring tower. If it is determined that scoring cannot read number, it must be changed before the next scheduled event, or car will not be scored.
- 4) Number will be neatly placed in right front headlight as large as possible that fits neatly in assigned area. Car number will also be placed on the top right hand portion of the windshield, 3" high.
- 5) A rear spoiler not exceeding 6" in height allowed. Hood scoops, skirts, front dams, and other items, which improve the appearance of your car, are permitted.
- 6) Advertising that is deemed unsuitable/offensive not allowed. Promoter has final decision.
- 7) Entrees will be painted and maintained reflecting a favorable image. Dents should be reasonably repaired week to week. Cars will be painted and touched up week to week.
- 8) All external lights must be removed. Holes should be covered neatly with flat metal
- 9) A yellow stripe, minimum 3" high x 24" long is to be placed on rear bumper for all "Rookie" drivers.

Glass

- 1) A Serviceable windshield is required (NO CRACKS). Stock windshields may and should be replaced with a quality lexan. Screws are not to be used to hold windshield.
- 2) All external lights must be removed. Holes should be covered neatly with flat metal.
- 3) Two braces required center of windshield opening.

Frames

- 1) No tubular sub-frame assemblies allowed.

- 2) No full tubular or roll bar frame permitted.
- 3) Frame rails forward of front, or behind rear, suspension-mounting points may be replaced with new material. New material must be at least as heavy as stock pieces were and be mounted in a stock location.
- 4) Ride height, with driver, post race, is a minimum of 2", measured from the lowest point of car, not including the exhaust system, suspension mounting points, or control arms.
- 5) Sparking or dragging of any part may be cause for immediate posting (black flag) from the race. You will not be allowed back on the track until the problem has been fixed and checked by an official.

Suspension

- 1) Stock suspension components only. **Only stated modifications allowed.**
- 2) No moving of suspension mounting points other than those outlined in the rules.
- 3) No interchanging, lengthening, or shortening of suspension components (i.e. control arms) permitted.
- 4) No adjustable or aluminum shocks.
- 5) Rear springs must be mounted in stock location.
- 6) Stock sway bar hardware may be replaced to permit adjustment. No aftermarket sway bars.
- 7) Adjustable inner spring spacers allowed on front springs only. (Not screw jacks).
- 8) Shocks must mount in stock location using stock mounts. No upside-down mounting.
- 9) Lowering blocks allowed. Non-adjustable only.
- 10) Longer leaf spring shackles allowed.
- 11) No pop in or screw-in metal spacers allowed. Spacers must be secured to spring.
- 12) Front upper strut mounting holes may be altered.

Steering

- 1) Stock steering components only, including rack, tie rod ends, etc.
- 2) Steering wheel pad is mandatory.
- 3) Steering wheel will be attached with an approved quick release device.
- 4) No steering quickeners.
- 5) Collapsible column recommended.

Drive-train Components

- 1) Locked, Limited slip, or Posi-Traction rear ends permissible. (NO AFTERMARKET LOCKER)
- 2) Rear end must be centered on rear springs as factory.
- 3) Stock transmissions, for make and model only. No modifications allowed.
- 4) All gears must be operable, including reverse.
- 5) Stock clutch, pressure plate, and flywheel, for make, model, and year only. No lightening of flywheel permitted. No lightweight parts.
- 6) The flywheel housing must have a means to **CLEARLY** inspect **ALL** components.
- 7) Automatic transmissions require functioning torque converter.

- 8) Drive shaft is to be painted white and have a catch loop just behind front u-joint.
- 9) No aluminum or composite drive shafts. No homemade or custom fabricated drive shafts! Stock for make, model, and year.

Wheels, Tires & Brakes

- 1) Steel tires new or used. MAXIMUM of 7" STEEL wheels with a minimum backspace of 2". Racing wheel required on right front. All lugs must be serviceable and must have 1" lug nuts on all lugs. TIRE TREATMENTS OF ANY KIND NOT ALLOWED! SPEC TIRES FROM PREVIOUS YEARS ALLOWED.
- 2) If tires/wheels protrude further than 1" from side of car, a type of nerf-bar must run completely between wheel well openings as well as in front and behind wheel well openings in order to prevent tire jumping when running side-by-side with other cars. Bars must be constructed of no less than 3/4" metal tubing material, be a minimum of 5" tall, be mounted parallel to the ground in line with front wheel bearing, and have tapered and capped edges (rounded if not flush with side of body) to prevent cutting of competitors' tires. Bars should be no less than 1" from the tires furthest point from side of the car.
- 3) One valve stem per wheel maximum.
- 4) The use of any bleeder valve prohibited.
- 5) Stock brake components only (make, model, and year).
- 6) **Mandatory-all four brakes must function at all times. *****
- 7) One (1) Proportioning valve allowed.

Roll Cage

- 1) The cage will be constructed at minimum of 1 3/4 .095 roll bar tubing.
- 2) Minimum 6-point roll cage required, with gussets at 90 degree joining points.
- 3) No galvanized or soft metals such as aluminum or exhaust tubing allowed
- 4) The cage may be enhanced for safety and to defend from damage, subject to approval.
- 5) The cage will be secured at four points, sandwiched with 1/8 min steel plates to the floor, and two additional points to the rear of the car.
- 6) The cage will come up around the driver, forming a rectangle on the roof.
- 7) Drivers' door will have a minimum of three bars, with 1/8" steel plating from top to bottom and from front to rear uprights, to shield the driver from an object punching through. Passenger side will have a minimum of 2 bars.
- 8) Vent window upright "A" pillar support bar required driver and passenger side, minimum 1" tubing.
- 9) The cage is to be welded and secured in a quality manner with the ultimately to protect the driver.
- 10) Roll bar padding is required on any bars that are in the drivers contact area.
- 11) **SHORTY, OFFSET, OR PARTIAL CAGES NOT ALLOWED! EXISTING CARS WITH AN OFFSET CAGE OR SMALLER DIAMETER TUBE MUST ADD 25LBS TO RIGHT SIDE FLOOR, NEAR CENTER OF DOOR AND AS FAR RIGHT AS POSSIBLE. THIS WEIGHT MUST BE IN ADDITION TO THE MINIMUM CAR WEIGHT. C.W.M.S.A. OFFICIALS WILL HAVE**

FINAL SAY ON WHICH CARS NEED THE WEIGHT AND WEIGHT PLACEMENT. WEIGHT MUST BE LEAD OR STEEL AND MUST BE EASILY REMOVED FOR CHECKING.

- 12) Driver-side floorboard must have minimum 1/8" steel plate from firewall to rear of driver's seat at least as wide as bottom of seat.
- 13) If any bar in the car is in question, the driver may be asked to drill a 3/16" hole in it to allow the inspector to check it.

Minimum Weights

- 1) Checked post race with driver in car. All added weight must be outside of driver's compartment, painted white, and have car number clearly marked on it.
- 2) All cars must weigh a minimum of 2275 lbs.
- 3) Rear wheel drive cars that run 500 Holley Carburetor must add 50 lbs. (example 2.3 rwd=2400 lbs.)

<u>ENGINE DISPLACEMENT (cc)</u>	<u>CAR WEIGHTS (lbs.)</u>
0-2200	2275
2201-2300	2350
2301-UP	2500